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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,616	04/02/2004	Kia Silverbrook	HYG015US	9410

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SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

KIM, TAE W

ART UNIT PAPER NUMBER

2876

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/815,616

Applicant(s)

SILVERBROOK

Examiner

Tae W. Kim

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Receipt is acknowledged of the RCE filed on January 8, 2007.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim(s) 1, 2, 4-6, 11-15, 17, 18, and 23 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) in view of Chambers (US 4881061) and Axelrod (US 5337358).

Re claim 1: Gogulski discloses a shopping system comprising: a shopping receptacle (fig 1 part 22) having a shopping receptacle identity (col 7 lines 56-58), the shopping receptacle comprising an optical sensing device (fig 1 parts 26 & 46, col 5 lines 27-35, col 6 lines 2-16) adapted to:

(b) sense second coded data indicative of a product identity on an interface surface of a product item (col 5 lines 27-35 & 51-59, col 6 lines 14-16);

(d) generate second indicating data identifying the product identity using the sensed second coded data (col 5 lines 51-59, col 6 lines 14-16); and

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(e) transfer shopping receptacle identity data (col 7 lines 52-58 discloses transmission and/or broadcasting by carts. The entire control panel (fig 1 part 12) is considered to be a sensing device.). and the second indicating data to the computer system (col 5 lines 51-59, col 6 lines 14-16), the computer system being responsive to the received data to perform an action (col 5 lines 59-61).

However, Gogulski does not disclose or fairly suggest a card for identifying a user to a computer system using a sensing device, the card having an interface surface having disposed thereon or therein first coded data,

and an optical sensing device adopted to:

(a) sense at least one first coded data portion on the card;

(c) generate first indicating data identifying the user identity using the sensed first coded data

(e) transfer the first indicating data to the computer system.

Chambers however discloses a card (fig 1 part 210) for identifying a user to a computer system (col 3 lines 63-67) using a sensing device (fig 5 parts 801 & 802 col 8 lines 3-20), the card having an interface surface (fig 1 part 210) having disposed thereon or therein first coded data (fig 1 part 412),

and an optical sensing device (fig 5 parts 801 & 802) adopted to:

(a) sense at least one first coded data portion on the card (col 8 lines 3-20);

(c) generate first indicating data (fig 1 part 412) identifying the user identity using the sensed first coded data

(e) transfer the first indicating data (fig 1 part 232, col 6 lines 37-40, col 9 lines 41-52) to the computer system (fig 6 part 541).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Chamber's teaching in Gogulski's shopping system for the purpose of authenticating the card and discouraging counterfeits. Authenticating plurality of user identifying data including both the encoded data and the non-encoded data would strengthen the security of the card.

Furthermore, Gogulski as modified by Chambers does not disclose or fairly suggest the first coded data including a plurality of first coded data portions, each coded data portion being indicative of an identity of the user.

Axelrod however discloses the first coded data including a plurality of first coded data portions, each coded data portion being indicative of an identity of the user (col 3 lines 15-22).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Axelrod's teaching in shopping system of Gogulski modified by Chambers for the purpose of discouraging counterfeit ID card by making such counterfeit more difficult by providing redundant identity data portions on the card.

Re claims 2 & 15: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12, wherein each first coded data portion is provided at a respective position on the interface surface (Axelrod: fig parts CB & CF), and wherein the sensing device (Axelrod: fig part 24) generates first indicating data indicative of at least one of:

(a) a position of the sensed first coded data (Axelrod: col 5 lines 1-5);

- (b) a position of the sensing device relative to the interface surface;
- (c) an orientation of the sensed first coded data; and,
- (d) an orientation of the sensing device relative to the interface surface.

Re claims 4 & 13: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12, wherein the computer system responsive to and the action is at least one of:

(a) associate the shopping receptacle with the user (Gogulski: col 2 line 52 – col 3 line 19: while the shopper is using the cart, the cart is associated with the shopper; therefore the preceding step of associating the shopping receptacle with the user is inherent.); and, (b) dissociate the shopping receptacle and the user (Gogulski: col 3 lines 20-30: the step of disassociating the shopping receptacle and the user is the step of shopper leaving the store without the cart.).

Re claims 5 & 17: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12, wherein the first coded data distinguishes the identity of the user from the identity of every other user known to the computer system (Axelrod: col 1 lines 60-68, col 2 lines 40-44, col 4 lines 59-63: police officer distinguishes the identity of the driver from the identity of every other driver known to the system.).

Re claims 6 & 18: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12, wherein the first coded data is redundantly encoded (Axelrod: col 3 lines 33-66).

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Re claim 11 & 23: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1, the method of claim 12, wherein the first coded data is disposed or the method includes disposing the coded data portion over a substantial portion of the interface surface (Axelrod: fig part CB).

Re claim 12: Gogulski discloses a method of shopping using a shopping receptacle (fig 1 part 22),

The shopping receptacle having a shopping receptacle identity (col 7 lines 56-58), and comprising an optical sensing device (fig 1 parts 26 & 46, col 5 lines 27-35, col 6 lines 2-16), wherein the method includes in the sensing device:

(b) sensing second coded data indicative of a product identity on an interface surface of a product item (col 5 lines 27-35 & 51-59, col 6 lines 14-16);

(d) generate second indicating data identifying the at least one product identity using the sensed second coded data (col 5 lines 51-59, col 6 lines 14-16); and

(e) transferring the shopping receptacle identity data (col 7 lines 52-58 discloses transmission and/or broadcasting by carts. The entire control panel (fig 1 part 12) is considered to be a sensing device.), and the second indicating data to the computer system (col 5 lines 51-59, col 6 lines 14-16), the computer system being responsive to the received data to perform an action (col 5 lines 59-61).

However, Gogulski does not disclose or fairly suggest a method of shopping using a card, the card having an interface surface having disposed thereon or therein first coded data,

and an optical sensing device adopted to:

(a) sensing at least one first coded data portion of the interface surface;

(c) generating first indicating data identifying the user identity using the sensed first coded data;

(e) transferring the first indicating data to the computer system.

Chambers however discloses a method of shopping using a card, the card having an interface surface (fig 1 part 210) having disposed thereon or therein first coded data (fig 1 part 412),

and an optical sensing device (fig 5 parts 801 & 802) adopted to:

(a) sensing at least one first coded data portion of the interface surface (col 8 lines 3-20);

(c) generating first indicating data (fig 1 part 412) identifying the user identity using the sensed first coded data

(e) transferring the first indicating data (fig 1 part 232, col 6 lines 37-40, col 9 lines 41-52) to the computer system (fig 6 part 541).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Chamber's teaching in Gogulski's shopping system for the purpose of authenticating the card and discouraging counterfeits. Authenticating plurality of user identifying data including both the encoded data and the non-encoded data would strengthen the security of the card.

Furthermore, Gogulski as modified by Chambers does not disclose or fairly suggest the first coded data including a plurality of first coded data portions, each coded data portion being indicative of an identity of the user.

Axelrod however discloses the first coded data including a plurality of first coded data portions, each coded data portion being indicative of an identity of the user (col 3 lines 15-22).



Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Axelrod's teaching in shopping system of Gogulski modified by Chambers for the purpose of discouraging counterfeit ID card by making such counterfeit more difficult by providing redundant identity data portions on the card.

Re claim 14: Gogulski as modified by Chambers and Axelrod discloses the method of claim 12, wherein the method includes, in the computer system:

- (a) receiving the indicating first data from the sensing device (Axelrod: fig parts 24); and,
- (b) determining, using the received first indicating data, user identity data indicative of the identity of the user (Axelrod: col 1 lines 45-55, col 3 lines 7-22); and,
- (c) performing the action using the user identity data (Axelrod: col 4 lines 1-5, 21-24, and 32-34 discloses actions such as displaying and recording.).

4. Claim(s) 7 and 19 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) and Axelrod (US 5337358) in view of Tame (US 20040026502).

Re claim 7 & 19: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12.

However Gogulski as modified by Chambers and Axelrod does not disclose or fairly suggest that the first coded data is redundantly encoded using Reed-Solomon encoding.

Tame however discloses that the coded data is redundantly encoded using Reed-Solomon encoding (fig 2 par. 0046).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Tame's teaching that the coded data is redundantly encoded using Reed-Solomon encoding to the shopping system and the method of Gogulski as modified by Chambers and Axelrod for the advantage of using Reed-Solomon codes that the probability of an error remaining in the decoded data is usually lower than the probability of an error if Reed-Solomon is not used.

5. Claim(s) 8-10 and 20-22 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) and Axelrod (US 5337358) in view of Dougherty (US 6076734).

Re claim 8 & 20: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12.

However, Gogulski as modified by Chambers and Axelrod does not disclose or fairly suggest that the first coded data is substantially invisible to the unaided eye.

Dougherty however discloses that the first coded data is substantially invisible to the unaided eye (col 5 lines 32-40, col 9 lines 33-36).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's teaching that the first coded data is substantially invisible to the unaided eye to the shopping system and the method of Gogulski as modified by Chambers and Axelrod for the purpose of ensuring that the coded data is protected from unauthorized reading.

Re claim 9 & 21: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12.

However, Gogulski as modified by Chambers and Axelrod does not disclose or fairly suggest that the first coded data is printed using infrared ink.

Dougherty however discloses that the first coded data is printed using infrared ink (col 2 lines 59-64, col 4 lines 18-23, col 5 lines 32-58, col 10 lines 39-45).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's teaching that the first coded data is printed using infrared ink to the shopping system and the method of Gogulski as modified by Chambers and Axelrod for the purpose of ensuring that the coded data is protected from unauthorized reading.

Re claim 10 & 22: Gogulski as modified by Chambers and Axelrod discloses the shopping system of claim 1 and the method of claim 12.

However, Gogulski as modified by Chambers and Axelrod does not disclose or fairly suggest that the first coded data is provided on the interface surface coincident with visible markings.

Dougherty however discloses that the first coded data is provided on the interface surface coincident with visible markings (fig 1 parts 32 & 34, col 2 lines 43-58, col 5 lines 48-62).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's teaching that the first coded data is provided on the interface surface coincident with visible markings to the shopping system and

the method of Gogulski as modified by Chambers and Axelrod for the purpose of indicating positions of the encoded data.

### ***Response to Arguments***

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Gogulski reference in combination with Chambers and Axelrod references teaches a shopping receptacle having all of the features specified in claim 1 and a method having all of the steps specified in claim 12. Furthermore, the sensing device in Chambers reference is adapted to sense both the first coded data on user identity cards and the second coded data on product items.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae W. Kim whose telephone number is 571-272-5971. The examiner can normally be reached on Mon-Fri 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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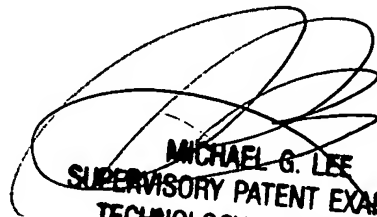
system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae W. Kim

Art Unit 2876

Patent Examiner

TWK



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